

CHAPTER 1

INTRODUCTION

1-1. GENERAL.

WARNING

Unauthorized modification to, and deviations from prescribed life support and survival equipment by individual aircrew-member could create unknown safety hazards. The OPNAVINST 3710.7 Series specifies minimum requirements for such equipment and is supplemented by the individual model NATOPS.

1-2. OPNAVINST 4790.2 Series identifies NAVAIR-SYSCOM as the only authority for modifications to life support and survival equipment, which is usually accomplished by the Fleet Support Team (FST) (formerly Cognizant Field Activity (CFA)) via Aircrew Systems Changes or a change to the equipment procurement package. This manual also permits an operating activity with approval of the controlling custodian, to conditionally modify ONE UNIT of equipment in-service to correct or overcome unsatisfactory conditions in that equipment item. Any other type of deviation/peculiar configuration or modification to life support and survival equipment is disallowed, and the Aircrew Survival Equipmentman has no authority or responsibility to perform them.

1-3. If an omission or conflict should occur between FST documents and NATOPS requirements, or if there is a need for clarification of equipment configuration or if equipment deficiencies are discovered, the applicable FST should be notified. If maintenance deficiencies are discovered, they shall be reported to area type commander in accordance with OPNAVINST 4790.2 Series. The FST for most of the life support and survival equipment is Commander, Naval Air Warfare Center Aircraft Division (NAWCAD), Attn: Code 4.6.1.2, Bldg 2187, Patuxent River, MD 20670-1906. For parachutes and related hardware, including torso harnesses, the FST is the Naval Air Warfare Center Weapons Division, Code 463000D, China Lake, CA 93555. NAWCAD DET Indianapolis, IN 46219 has cognizance over all survival radios and emergency beacons. NSWC, Indian Head, MD is FST for the FLU-8B/P Automatic Inflation Device.

1-4. The Aviation-Crew Systems manual is released under the authority of the Naval Air Systems Command in compliance with the request of the Chief of Naval Operations. The instructions contained herein are mandatory. This manual consists of separately bound volumes, as listed below:

TITLE	PUBLICATION NUMBER
Inflatable Survival Equipment (Liferafts)	NAVAIR 13-1-6.1-1
Inflatable Survival Equipment (Life Preservers)	NAVAIR 13-1-6.1-2
Parachutes	NAVAIR 13-1-6.2
Seat Survival Kits (Oxygen Hoses and Non-SKU Seat Kits)	NAVAIR 13-1-6.3-1
Seat Survival Kits (SKU Series Seat Kits)	NAVAIR 13-1-6.3-2
Oxygen Equipment (Aircraft Equipment, Masks, and Other Systems)	NAVAIR 13-1-6.4-1
Oxygen Equipment (Regulators)	NAVAIR 13-1-6.4-2
Oxygen Equipment (Concentrators)	NAVAIR 13-1-6.4-3
Oxygen Equipment (Converters)	NAVAIR 13-1-6.4-4
Rescue and Survival Equipment	NAVAIR 13-1-6.5
Aircrew Personal Protective Equipment (Aircrew/Passenger Equipment)	NAVAIR 13-1-6.7-1
Aircrew Personal Protective Equipment (Clothing)	NAVAIR 13-1-6.7-2
Aircrew Personal Protective Equipment (Helmets and Masks)	NAVAIR 13-1-6.7-3
Aircrew Personal Protective Equipment (Protective Assembly, Aircrew Survival - Armor)	NAVAIR 13-1-6.7-4
Special Missions Aircrew Equipment	NAVAIR 13-1-6.10

NAVAIR 13-1-6.1-1

1-5. The purpose of each volume is to provide technical information related to the function, inspection and repair of a particular category of aircrew safety and survival equipment. The information contained in each volume is intended for organizational, intermediate and depot levels of maintenance as established within the Naval Aviation Maintenance Program (OPNAVINST 4790.2 Series).

1-6. DESCRIPTION OF NAVAIR 13-1-6.1-1.

1-7. CONTENTS. This volume contains information on configuration, functions, application, inspection, repair and packing of liferaft inflatable survival equipment. Packing and folding of LR-1 and LRU-23/P liferafts used in Seat Survival Kits are covered in NAVAIR 13-1-6.3-1 and NAVAIR 13-1-6.3-2.

1-8. CONFLICTS AND SUPERSEDURES. This volume shall take precedence over all other documents except for effective related Aircrew System Changes, Interim Aircrew System Changes and Aircrew System Bulletins. This document is effective until officially rescinded, canceled or superseded.

1-9. The modifications section of each chapter lists all effective changes and bulletins which affect inflatable survival equipment and have been issued on or before the date of latest change or revision. When applicable, the subject matter of these documents has been incorporated within the text of the appropriate chapters.

1-10. Effective changes and bulletins which affect inflatable equipment and are issued between changes and revisions to this volume should be recorded in the modification section of the manual for the affected equipment by annotating the outer margin of the page with a vertical line and the number of the change or bulletin. A copy of the change or bulletin should be filed in a separate binder in the ALSS work center. When this volume is updated these documents will be listed in the modification sections of the applicable chapters and the text of the chapters will be updated to reflect the changes and bulletins.

1-11. Appendix A is reserved. Appendix B lists metric system and metric unit conversion charts. Appendix C lists supplies, materials or equipment used in the volume which is not listed in the IPBs.

1-12. UPDATING. This volume will be updated periodically by the issuance of a Revision, which is a 100-percent

replacement of pages. Between revisions, changes and rapid action changes will be released, which are partial replacements of pages. All added and changed pages shall be incorporated according to page number. Superseded and deleted pages shall be discarded in accordance with local security procedures for data containing distribution statements. A List of Effective Pages is provided with each change. The List of Effective Pages will show the most current change or rapid action change. A summary of the major changed areas for a particular change is located directly beneath the List of Effective Pages.

1-13. TECHNICAL PUBLICATION DEFICIENCY REPORT. Technical publication deficiencies shall be submitted in accordance with OPNAVINST 4790.2 Series.

1-14. ENGINEERING DRAWINGS. Government engineering drawings are available to the fleet by submitting a letter of request to Commanding Officer, Naval Air Technical Data and Engineering Service Command, Naval Air Station North Island, P.O. Box 357031, Building 90 Distribution, San Diego, CA 92135-7031. Each request should include the equipment nomenclature, part number, and CAGE code. The drawings will be provided in the form of aperture cards (Automatic Data Processing Punch Cards). Technical data may also be obtained online at the NATEC website located at <http://www.natec.navy.mil>. Authorized users must first establish an account prior to obtaining data. Access/account information can be obtained at the NATEC website.

1-15. TECHNICAL DIRECTIVES AND FORMS. NATEC is the central management activity for aeronautical technical publications, engineering drawings and associated technical services. Upon release, NATEC will forward to all designated activities, copies of Technical Directives and Forms. Additional copies are available utilizing the procedures shown in [paragraph 1-14](#) as well as from the PMA-202 website at <https://pma202.navair.navy.mil>.

1-16. QUALITY ASSURANCE. Quality assurance steps are provided for critical operations. When a step is underlined, the Aircrew Survival Equipmentman shall perform the operation, then have performance verified by a Collateral Duty Inspection (CDI-CDQAR-QAR) as established within the Naval Aviation Maintenance Program (OPNAVINST 4790.2 Series) prior to proceeding to the next operation. In no case shall an Aircrew Survival Equipmentman perform his/her own quality assurance inspection.

1-17. SUPPLEMENTARY PUBLICATIONS.

1-18. The following publications supplement this volume:

1. NAVAIR 00-35QH-2 Allowance List. Aviation Life Support System and Airborne Operation Equipment for Aircraft Squadrons Navy and Marine Corps.

2. OPNAV INSTRUCTION 4790.2 Series. The Naval Aviation Maintenance Program.

3. List of Naval Aviation Life Preserver and Liferaft Equipment E0088.

4. OPNAVINST 4410.2A.

5. OPNAV INSTRUCTION 3710.7 provides general instructions on required minimums for aircrew personal protective equipment.

6. NATOPS MANUALS provide instructions on required inflatable survival equipment.

7. Naval Logistics Library (NAVSUP 600).

8. Code of Federal Regulations 49 CFR 71 90 provides information on hydrostatic testing of multiple liferaft CO₂ cylinders.

9. NAVAIR 13-1-6-8 Aviation Crew Systems Work Unit Code Manual.

10. NAVAIR 01-1A-509 Cleaning and Corrosion Organizational and Intermediate Maintenance.

11. NAVAIR 11-100-1.1 General Use Cartridges and Cartridge Actuated Devices for Aircraft and Unique Aircraft Systems (CADS).

12. NAVSUPINST 4440.128B.

13. NAVSUPINST 4423.29 (Series). Naval Material Command (NMC) Uniform Source, Maintenance and Recoverability (SM&R) Codes.

14. NAVSUP P-719 is a Guide for the Assignment and Use of Source, Maintenance and Recoverability (SM&R) Codes.

1-19. DEFINITIONS.

1-20. The following is a list of definitions used in this volume:

WARNING

Indicates danger to personnel. The warning precedes the item to which it refers.

CAUTION

Indicates danger to the equipment. The caution precedes the item to which it refers.

NOTE

An information item. The note may precede or follow the item to which it refers.

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